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ABSTRACT

A study examined whether or not high school teachers could name or list the reading skills needed by their students. The three skills categories were comprehending expository text, understanding content area vocabulary, and applying word analysis skills. The questions used to elicit information from teachers were (1) What must students do to understand what they read? (2) What must students do to comprehend the meanings of the words they read? and (3) What skills are needed so your students can correctly pronounce words? Teachers in all content areas were surveyed at two urban high schools and 116 usable surveys were analyzed. Results indicated that teachers had minimal acquaintance with the reading skills their students need for comprehension of expository text. In terms of comprehending the meanings of words, teachers were in agreement with reading experts, listing the use of context clues and the dictionary most frequently. Most teachers also agreed with reading experts that for students to pronounce unfamiliar words, they must know word analysis skills and how to use a dictionary. Teachers were significantly more aware of the skills students need to become better students than the specific reading skills they need to become better readers. (Survey questions and teachers' responses are included, as are 25 references.) (SRT)

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HIGH SCHOOL TEACHERS' AWARENESS OF READING SKILLS

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A Report to the
Faculty Research Fund of
Western Michigan University

Bruce A. Lloyd
April 1987

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HIGH SCHOOL TEACHERS' AWARENESS OF READING SKILLS

Reading is a major method of communication and a process by which most learning takes place. The reading act is especially important at the high school level because it is through print material that students gain information about the subjects they are studying. Therefore, secondary students need to be good readers in order to master their subjects and function as learners. However, many students do not read as well as they could and often experience great difficulty in attempting to read the assigned text. Because this situation exists in many schools, corrective action is needed. The best remedy is for students to become more proficient readers. The best way for them to achieve that is through appropriate help from their various teachers.

Many reading authorities recommend that content teachers teach the appropriate reading skills so that students can learn better from the medium of print. The subject matter specialist, who is an expert in a given field, is actually in the best position to teach the reading skills students need (Shepherd, 1982). The content teacher understands what is important in a discipline and is best able to focus on the key elements of it. The secondary teachers can help students sift through the reading material to discover the vital concepts required for content mastery.

How to do this or the ways in which secondary teachers can teach reading skills to their students is the subject

of many reading methods texts and beyond the scope of this research. What is of concern here is the degree to which content teachers are aware of the reading skills that students must use in understanding textbooks. The focal question of this study, supported by a grant from the Faculty Research Fund of Western Michigan University, is "How completely can high school teachers list the reading skills their students must use to read their texts?"

If we recognize that there is a need for better student reading at the secondary level and that content teachers play a vital role in teaching students those skills, then we must find out if these teachers are aware of the reading skills needed by their students. Such a viewpoint is supported by Roe, Stoodt, and Burns who state that content area teachers need to determine whether students possess the reading skills needed to effectively understand course material. To do this, secondary teachers must be aware of the reading and study skills pertaining to the particular subject (Roe, et.al., 1987).

It seems reasonable to assume that if high school teachers can describe or list the reading skills needed by their students, there is a greater likelihood that these skills are being taught. Although one cannot be certain of this assumption, the possibility does exist. However, if teachers are not aware of the reading skills their students need, chances are that the skills are not being taught and their students suffer the consequences. "... while knowledge of reading skills cannot be assumed to

result in teaching students to use these skills, that knowledge is a prerequisite to teaching students to effectively read subject matter material (Braam and Walker, 1973). Of course, this assumption also may not be true and poses another problem for further research.

The purpose of the present study was to find out if high school teachers could name or list the reading skills needed by their students. The three skill categories included comprehending the expository text, understanding the vocabulary of the subject and applying word analysis skills.

The value of learning such information is important. Teacher responses would indicate their present concepts about reading and that could point the way for appropriate inservice educational programs. If teachers evidence little or no understanding of how to help their students comprehend what they read, or if there is considerable misinformation about vocabulary development and word analysis skills, then a series of inservice programs focusing on these deficiencies should be offered.

The results of such inservice activities, relating directly to teacher needs, could substantially improve classroom teaching and student learning. In the end, students could become more knowledgeable in their pursuit of learning and more responsible as citizens contributing to society as a whole (Sheperd, 1982).

Review of Related Literature. Studies that focus on this topic are far from numerous. In what may be the first such study Braam and Roehm (1964) sampled teachers' knowledge of

reading skills through a survey containing three questions relating to reading skills:

1. Which specific reading skills do you consider most necessary for your students in order for them to read the materials used in your subject area?
2. Which reading skills are your students best able to apply to the reading material in your subject?
3. In which reading skills are your students most deficient?

Teacher response showed that critical reading, vocabulary, study skills and reading rate were most necessary for students. However, many respondents were not only unaware of the skills needed by their students, but they could not tell which skills students could best apply. Moreover, many did not indicate the skills where students were deficient. In replicating the study nearly a decade later, Braam and Walker (1973) asked the same questions and drew similar conclusions. In that study, those authors further concluded that content teachers were more aware of students' reading deficiencies than strengths and were generally unfamiliar with reading skills. Moreover, communication between reading experts and secondary classroom teachers is no more effective now than before.

In a pilot study, Lloyd (1986) replicated the Braam and Walker study, administering the questionnaire to seventy-six graduate students teaching at the secondary level. He concluded that these teachers believed reading comprehension was the most important skill needed by their students. The next most important

skill was vocabulary. Word analysis was rated third. Moreover, the reading skills most needed by their students seem to be the skills in which the students are most deficient and this finding supports that of Braam and Walker. It is noteworthy that thirty-seven per cent of the respondents could not list which reading skills their students were best able to apply.

Frager (1984) investigated the accuracy of content teachers' judgements about the reading abilities of secondary students. He explored the relationship between the various types of information that teachers used in making such judgements. Among the sample there were 31 English and 22 social studies teachers. The judgemental factors included oral reading, study skills, vocabulary knowledge, comprehension skills, and physical/attitudinal elements. No significant relationships were found between types of information read and judgements of reading abilities. It should be noted that teachers were not asked to list the various reading skills because the skills were presented as criterion reference factors.

The meager amount of literature on this topic seems significant because of its absence. Yet, lack of information is information in itself. One could conclude that other researchers are not yet conducting and reporting such studies -- for whatever reason. However, with the present emphasis on better reading by students at all levels, it is necessary to find out how aware high school teachers are about reading skills because those skills must be taught to students. And it should be done con-

currently as they teach their subject. The difficulty of secondary school textbooks requires students to read the higher cognitive levels (Vacca, 1981). If they are not taught how to read the text, their mastery of the subject can falter.

The Data Gathering Instrument. The first step in this phase of the study was to design a suitable survey, one that would elicit appropriate teacher responses without divulging correct answers. One pitfall that Braam and Walker encountered was that of interpreting responses. Walker, in personal correspondence, wrote that his study should be repeated, and the questions asked should be more specific. He explained that a survey to educe information about secondary teachers' awareness of reading skills should be worded so there would be less chance of misinterpreting the intent of teachers' responses.

The subsequent replication of the Braam and Walker study generated information that was useful in forming appropriate open-ended questions for the new survey instrument (Lloyd, 1986). Three major reading skill clusters were identified in that study. They included comprehension, vocabulary, and word analysis. To draw forth teacher knowledge about reading comprehension skills, this question was asked, "What must your students do to understand what they read?" To find out their knowledge of vocabulary skills, this question was asked, "What must students do to comprehend the meanings of the words they read?" To discover their knowledge of word attack skills. Teachers were asked, "What skills are needed so your students can correctly pronounce words?"

Validation. The original questionnaire used by Braam and Walker (1973) and then by Lloyd (1986) was redesigned for the present study. The changes that were made followed the pattern recommended by several measurement experts and incorporated the findings of the Lloyd pilot study.

The initial step involved validating the survey instrument. This was accomplished by first determining the purpose for which the survey was redesigned and then going on to meet other validation criteria. As previously noted, content teachers were to indicate their awareness of reading skills by responding to questions about reading comprehension, vocabulary knowledge, and word attack skills. According to the measurement specialists, the validity of a questionnaire is concerned with whether or not it actually produces the information requested or intended. That is, the instrument is valid if it does, indeed, bring out true responses regarding the information wanted. Therefore, those who respond to the survey must understand the questions asked in the same way as those who designed the survey (Berdie and Anderson, 1974).

According to Carmines and Zeller (1979), "In a very general sense, any measuring device is valid if it does what it is intended to do" (p. 12). Moreover, "... validity concerns the crucial relationship between concept and indicator ... one does not assess the validity of an indicator but rather the use to which it is being put" (p. 12). Therefore, "Validity ... is usually more of a theoretically oriented issue because it in-

Western Michigan University DAHF

READING RESOURCES CENTER

Secondary Teachers'
SURVEY
of
High School Students' Reading Skills

This survey is expected to help educators design effective inservice educational programs for secondary teachers. Please respond openly and candidly. *All information is confidential. No one will know how you responded.*

Also, if you do not know the answers, reply according (UK = unknown). A "don't know" is important because it also gives us usable information.

With the current focus on high school reading, it is crucial that we find out what secondary teachers know and do not know about reading skills. This information is vital because it will provide

1. focus/content in READING METHODS COURSES for our students.
2. guidelines to EFFECTIVE INSERVICE PROGRAMS for secondary teachers.

Please note that there are more questions on the back of this page. However, the survey takes only 7-8 minutes to complete.

1. Female _____ / Male _____

2. Years of teaching _____

3. Which subject(s) do you teach or have you taught in the last 3 years?

4. As an undergraduate student, did you take a reading methods course (or courses)?

   Yes _____ / No _____. If yes, how many? _____

5. Have you had a graduate level reading methods course (or courses)?

   Yes _____ / No _____. If yes, how many? _____

6. Have you participated in inservice programs (conferences, workshop, etc.) on teaching reading in the content/subject areas during the past 3 years?

   Yes _____ / No _____. If yes, please list them.

7. Do you have other background experiences related to teaching reading?

Yes _____ / No _____. If yes, please note --

8. What must students do to <u>understand</u> what they read?

9. What must students do to comprehend the meanings of the words they read?

10. What skills are needed so your students can correctly pronounce words?

Thank you for your cooperation in helping us gather information for this important study. This questionnaire was adapted from Leonard S. Braam and James E. Walker, "Subject Teachers' Awareness of Reading Skills," <u>Journal of Reading</u>, 16:608-611, May, 1973 and revised with the assistance of Cynthia Halderson. DAHF.

evitably raises the question, 'valid for what purpose?" (p. 16) Consequently one can conclude that, "Validity, ... is evidenced by the degree that a particular indicator measures what it is supposed to measure" (p. 16). And, "... one validates not the measuring instrument itself, but the measuring instrument in relation to the purpose for which it is being used" (p. 17). Because the survey was designed to obtain information as noted, this criterion of validation was met.

The next step was to administer the amended Braam and Walker survey to a group of experienced content teachers and then discuss their responses. To this end, seventeen secondary teachers participated. Their suggestions were recorded as the discussion progressed, synthesized, and repeated to them for accuracy of interpretation. Subsequently, the questionnaire was redesigned and readministered. Discussion ensued and everyone seemed satisfied with the results, but further amendments were forthcoming. These changes were incorporated in the final version that appears here. This was the validation process for the final version of the survey, so content and construct validity (Salvia and Ysseldyke, 1978) were assured.

Treatment of Data and Findings. The first high school (a small urban area of 60,000) had a faculty of nearly fifty teachers. Thirty-seven of them submitted useable surveys. There were 17 female and 20 male faculty. Their teaching experience ranged from one to 36 years, and many taught more than one subject. There were nine teachers of English, eight who

Secondary Teachers' Awareness of Reading Skills

High School - 1 (N=37)

Question 8

What must students do to understand what they read?

a. Concentrate/focus on and think about reading 10
b. Relate reading to experiential background 8
c. Know how to read for main ideas 8
d. Have a large vocabulary 7
e. Read more 7
f. Have the ability to guess (anticipate) what the material is about 2
g. Use the dictionary 2
h. Discuss the material 2
i. Use decoding skills 2
j. Have a basic understanding of the language 1
k. Avoid reading word-for-word 1
l. Write about the material they read 1
m. Survey the material 1
n. Teachers should use relevant material 1
o. Teachers should know students' reading levels 1
p. Students should be taught how to read in earlier grades 1
q. Do not know 8

Question 9

What must students do to comprehend the meanings of the words they read?

a. Use context clues 9
b. Use the dictionary 8
c. Have a good vocabulary 7
d. Relate reading to their experiences 6
e. Know word analysis skills 5
f. Read (more) 3
g. Use words in communication 3
h. Have vocabulary drills 1
i. Anticipate word meanings 1
j. Keep a vocabulary notebook 1
k. Think about their reading 1
l. Read for main ideas 1
m. Gear material to students' reading level 1
n. Do not skip small words in sentences 1
o. Do not know 8

Question 10

What skills are needed so your students can correctly pronounce words?

a. Know word attack skills 22
   phonic analysis 15
   structural analysis 7
b. Use the pronunciation key 4
c. Know how to listen (hear) 4
d. Teachers should set a good example 4
e. Know spelling skills 2
f. Practice 2
g. Possess large sight vocabulary 2
h. Language experience 1
i. Have self-confidence 1
j. Have a good memory 1
k. Know the basic English skills 1
l. Visual discrimination 1
m. Sequencing 1
n. Smaller elementary classes 1
o. Teachers should know how to teach reading skills no matter what subject they teach 1
p. Do not know 10

taught mathematics, six who taught business, five in social studies, four science, three reading, and two music teachers. Their responses appear on the following page.

Thirteen of the respondents had taken an undergraduate reading methods course; 24 had not. Nine had taken a graduate level reading methods course; 28 had not. Eight had participated in some form of reading inservice programs; 29 had not. Seven had other background experiences related to reading; 30 had not.

The second high school (a large urban area of 200,000) had a faculty of 98 and 79 of them submitted useable surveys. There were 41 female and 38 male teachers. Their experience ranged from one to 26 years and many taught more than one subject. There were 21 who taught English, 16 who taught mathematics, six who taught business, three in social studies, seven science, six reading. Forty-one of the respondents had taken an undergraduate reading methods course and 38 who had not. Twenty-six had taken a graduate level reading methods course, 53 had not. Eight had participated in some form of reading inservice, 71 had not. Nineteen had other background experiences related to reading, 60 had not. Their responses appear on the following page.

Discussion. In order to determine the depth of reading skills knowledge recorded by participating teachers, it was decided that the five most frequent responses for each question and group should be noted and compared. This information appears

Secondary Teachers' Awareness of Reading Skills

High School - 2 (N=79)

Question 8

What must students do to understand what they read?

a. Understand vocabulary 28
b. Relate concepts to their own backgrounds 9
c. Concentrate on their reading 8
d. Explain concepts in their own words 6
e. Find main ideas 7
f. Use the dictionary 6
g. Understand writing/language 5
h. Decode and recognize words 5
i. Read for a purpose 5
j. Practice (read more) 5
k. Have good study habits 3
l. Use context clues 3
m. Do not rush into reading 3
n. Discuss in small groups 3
o. Ask questions 3
p. Read material at or below their reading level 3
q. Read for facts 2
r. Skim 2
s. Do not know 15

Question 9

What must students do to comprehend the meanings of the words they read?

a. Use context clues 25
b. Use dictionaries 21
c. Use words in their own sentences 15
d. Have a large vocabulary 10
e. Know word structure 8
f. Relate to their experiences 6
g. Know how to pronounce (decode) words 3
h. Do not know 20

Question 10

What skills are needed so your students can correctly pronounce words?

a. Know phonics 35
b. Know how to use the dictionary 12
c. Know structural analysis 10
d. Repetition -- practice 9
e. Use words in class 5
f. Have a good example to copy 5
g. Do not know 23

TABLE III

Secondary Teachers' Awareness of Reading Skills

High School 1 (N=37)

Question 8	Question 9	Question 10
What must students do to understand what they read?	What must students do to comprehend the meanings of the words they read?	What skills are needed so your students can correctly pronounce words?
a. Concentrate/focus on and think about reading (10)	a. Use context clues (9)	a. Know word attack skills (22)
b. Relate reading to experiential background (8)	b. Use the dictionary (8)	phonic analysis (15)
c. Know how to read for main ideas (8)	c. Have a good vocabulary (7)	structural analysis (7)
d. Have a large vocabulary (7)	d. Relate reading to their experiences (6)	b. Use the pronunciation key (4)
e. Read more (7)	e. Know word analysis skills (5)	c. Know how to listen (hear) (4)
Do not know (8)	Do not know (8)	d. Teachers should set a good example (4)
		e. Know spelling skills (2)
		Do not know (10)

High School 2 (N=79)

a. Understand vocabulary (28)	a. Use context clues (25)	a. Know phonics (35)
b. Relate concepts to their own backgrounds (9)	b. Use dictionaries (21)	b. Know how to use the dictionary (12)
c. Concentrate on their reading (8)	c. Use words in their own sentences (15)	c. Know structural analysis (10)
d. Explain concepts in their own words (6)	d. Have a large vocabulary (10)	d. Repetition -- practice (9)
e. Find main ideas (7)	e. Know word structure (8)	e. Use words in class (5)
Do not know (15)	Do not know (20)	Do not know (23)

on the following page. It should be noted that reading for understanding requires students to comprehend the vocabulary of the subject, to be able to find facts, main ideas, cause/effect, sequence, etc. It also demands that students use study skills, can summarize, outline major/minor components of the material read, and so on. (Roe, et.al., 1987; Shepherd, 1982; Vacca, 1981; Vacca and Vacca, 1986).

The teachers who responded to the survey indicated some minimal acquaintance with the reading skills their students need in order to understand what is read. They mentioned vocabulary as one vital skill and finding the main idea as another. Beyond this responses were concerned with what is best described as "student generic skills." That is to say, anyone who wishes to learn (to be a student in the broad sense) must concentrate on the task(s) at hand; relate the material to one's own background of experience; and read widely. Although these are skills needed to read and understand text material, they are more properly categorized as process/behavioral skills required of anyone wishing to learn through any medium.

In order for students to comprehend the meanings of the words they encounter in their reading, they should be able to use contextual clues as well as the dictionary and thesaurus. Here the respondents seemed to be in agreement with the reading experts because they listed using context clues and the dictionary most frequently. The teachers also noted that having a large vocabulary is necessary if students are to comprehend

the meanings of words. This factor belongs more properly as a response to question 8 on understanding what is read. Furthermore, knowing word analysis skills and word structure should be listed under question 10 relating to word pronunciation.

For students to pronounce words in a standard manner, they must know word analysis skills (phonic/structural analysis) and how to use the dictionary (pronunciation key). The majority of respondents proffered this suggestion. However, it is necessary to point out that knowledge of phonics (sound-symbol relationship) does not assure word meaning (Lloyd, 1985; Roe, et.al., 1987; Shepherd, 1982; Vacca and Vacca, 1986). And, although teacher response was correct for the wording of the question, one may wonder if these educators actually believe that teaching word analysis will enable their students to understand the meanings of the words. This point is worthy of further research.

Conclusions. Apparently the teachers responding to the survey could benefit from inservice programs designed to enhance their knowledge of reading as a process. For these educators, focus should be on reading for understanding and explaining how students need to be able to read for facts because knowledge at the literal level is vital to adequate comprehension at the higher levels of cognition. Moreover, explaining about cause/effect, sequence, outlining, etc. should also be a part of the inservice experience.

Further misconceptions by teachers are noted in their responses to the other questions. Although students can compre-

hend the meanings of words by using context clues and the dictionary, decoding is a different situation. Being able to use word analysis skills and word structure (decoding skills) seldom results in word meaning and respondents should have placed that suggestion as an answer to question 10. Moreover, the idea that students must practice pronouncing words and be able to listen effectively belong more properly as student generic skills (SGS).

The present study was undertaken to discover the degree to which secondary teachers were aware of the reading skills needed by their students. Although the respondents were correct in categorizing some reading skills, many of their suggestions fell into another (and unexpected) category that is hereinafter labeled as student generic skills (SGS). This finding is significant because it shows that these teachers are probably aware of the skills students need in order to become better students moreso than they are aware of specific reading skills students need to become better readers. Yet such skills are complementary and mutually reinforcing. There is evidence to indicate that when students are taught specific reading skills in a given subject or discipline, they not only become better readers, but also exhibit greater mastery of the content they read (Roe, et.al., 1987; Shepherd, 1982; Vacca and Vacca, 1986). No doubt the same situation exists with student generic skills. That is, when students are taught how to concentrate on and think about what they are doing, when they are taught to relate their learning activities to their own experiential background, when

they are taught to read more, and to explain what they have learned, the end result can be greater mastery of the content they read. So, whether better learning is approached through enhanced reading skills or more effective student generic skills, the results may very well be the same.

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